

Wildrose Lane: Study and Closure

Applicant	Location	Proposal
Public Works and Utilities Department	Wildrose Lane from, NW 27th Street to NW 31st Street, just south of Highway 34	Amend the Mobility & Transportation section to remove the “Wildrose Lane Study” and indicate the future closure of Wildrose Lane from, NW 27th Street to NW 31st Street
Recommendation: Approval The future closure and right of way vacation of Wildrose Lane, NW 27th Street to NW 31st Street is appropriate to take place when West Fletcher Avenue, NW 27th Street to NW 31st Street, is open to traffic.		

Status/Description

Amend the **Future Conditions: Mobility & Transportation** section to remove the “Wildrose Lane Study” designation and include a designation for the future closure and right of way vacation of Wildrose Lane, from NW 27th Street to NW 31st Street to take place when West Fletcher Avenue, NW 27th Street to NW 31st Street, is open to traffic.

Comprehensive Plan Implications

The extension of West Fletcher Avenue from NW 13th Street to NW 31st Street is in the Plan to become the primary east-west connection for this area. The development and extension of West Fletcher Avenue is necessary to serve the east-west traffic flows from the residential, industrial and commercial development that is projected in this general area that will be both safe and efficient. This roadway connection will provide access to US-34 from the east and to the Kawasaki facility from the west.

Wildrose Lane was included in the plan to be studied for possible closure. An engineering review shows Wildrose Lane as having existing safety and operational problems that are a direct result of its location. Findings indicate that the intersection of Wildrose Lane at NW 27th Street has inadequate sight distance for eastbound vehicles and there is a lack of adequate gaps in the NW 27th Street traffic (north-south) during Kawasaki work shift changes. These problems are exasperated with the majority of the traffic now using the new on and off ramps to US-34.

Union Pacific Railroad representatives are not interested in allowing two railroad crossings and recommend focusing the east-west traffic crossing their railroad tracks onto a single crossing point.

April 30, 2003

Representatives are agreeable to the relocation of the railroad crossing at the West Fletcher Avenue location.

Discussion has focused on the possibility of keeping Wildrose Lane open in addition to developing the West Fletcher Avenue connection. Several alternatives have been reviewed which include the following:

1. Develop the West Fletcher Avenue connection, NW 27th Street to NW 31st Street, and maintaining Wildrose Lane open as a rural roadway;
2. Develop the West Fletcher Avenue connection, NW 27th Street to NW 31st Street, and closing the Wildrose Lane connection;
3. Maintain Wildrose Lane as a rural (or urban) roadway connection and do not develop the West Fletcher Avenue connection, NW 27th Street to NW 31st Street;
4. Develop an alternative access to US-34 NW 13th Street, in addition to or in place of developing the West Fletcher Avenue connection;
5. Develop an alternative access to US-34 through the Kawasaki plant property (around NW 20th Street) in addition to or in place of developing the West Fletcher Avenue connection.

In looking at establishing the best road connections for this area, the approach was to establish the projected land uses for this area, identify those with direct interest in a connection, the level of traffic that can be expected, and a balance of safety and efficiency concerns.

Wildrose Lane

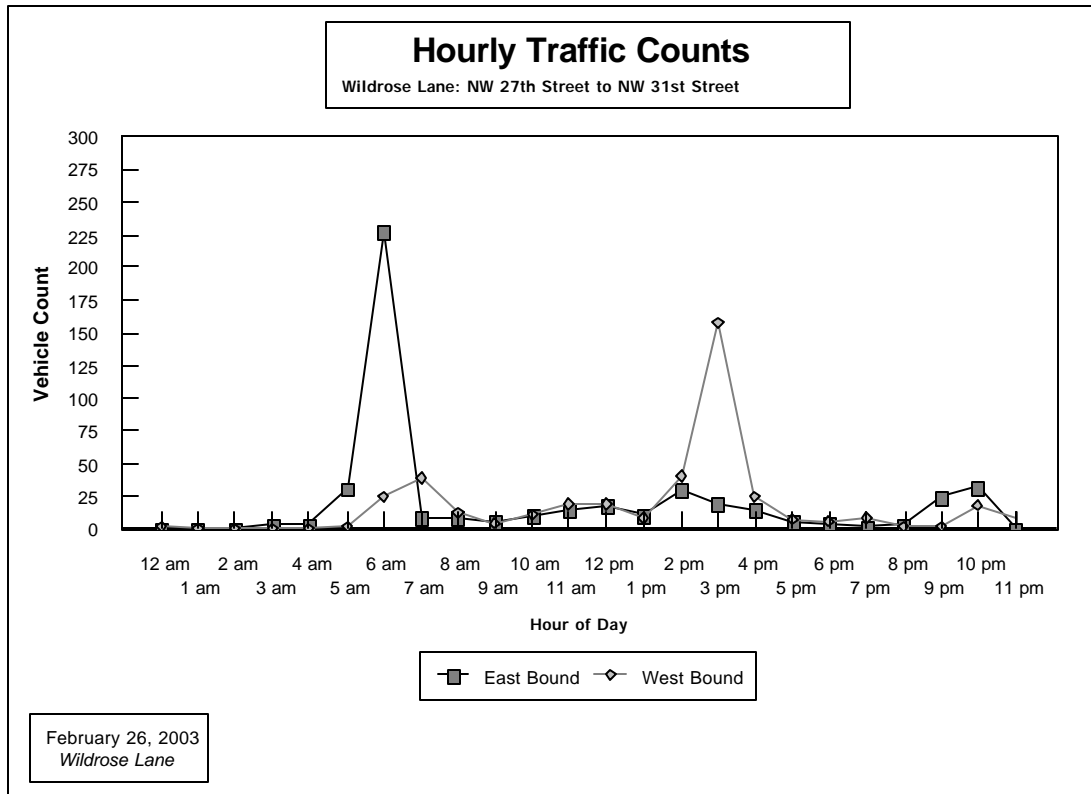
Wildrose Lane is a County facility approximately 0.3 mile in length with a rural roadway design. The roadway serves the Kawasaki plant and areas to the north of US-34, providing the only connection from NW 27th Street to the west. The recent annexation of the Kawasaki facility extended the Lincoln city limits to include NW 27th Street but Wildrose Lane was not incorporated into the city. Traffic traveling to the east uses the new half diamond on and off ramps to US-34 which were completed in the summer of 2001.

The Schemmer Associates, a local engineering consulting firm, was contracted to review the existing safety and operational problems. Their findings indicate that the intersection of Wildrose Lane at NW 27th Street has inadequate sight distance for eastbound vehicles and lack of adequate gaps in the NW 27th Street (north-south) traffic during Kawasaki work shift changes. Most of these problems are a direct result of its location. These problems are made worse with the majority of the traffic now using the new on and off ramps to US-34. Current traffic and the peaking at Kawasaki work shift changes is displayed in the graph below.

The geometry of Wildrose Lane is less than desirable at both ends where it intersects with north-south streets. The west end is too close to US-34 and feeds into the turn lane, and the east end is too close to the overpass structure. To improve the overall traffic safety and operations in this area, the engineers

April 30, 2003

reco
nded
remo
o f
existi
Wild
Lane
focu
east-
traffi
t h e
Fletc
Ave
corri



mme
t h e
v a l
t h e
n g
r o s e
a n d
s i n g
w e s t
c o n
W e s t
h e r
n u e
d o r.

Union Pacific Railroad

The Union Pacific Railroad line currently crossed by Wildrose Lane is to the west of NW 27th Street immediately south of US-34. This rail line completes a connection through Lincoln to Omaha and averages 2 to 4 trains per day. The current vehicular traffic counts that cross this rail line along Wildrose are 900 per day. The projected year 2025 vehicular traffic along the West Fletcher Avenue extension are estimated at 7,500 per day at the rail crossing.

The Union Pacific Railroad understands the greatest problems at the Wildrose Lane crossing to be vehicle and train safety. The close proximity Wildrose Lane to the US-34 structures creates a sight-distance problem for both vehicles and trains. In communications with Union Pacific representatives, the railroad is not interested in not allowing two railroad crossings in this corridor. They are interested in focusing the east-west traffic onto a single crossing point and are agreeable to the relocation of the vehicle traffic crossing one half mile to the south at West Fletcher Avenue. The Union Pacific conditions for establishing a crossing at West Fletcher Avenue is for the City and/or County to assume the costs of constructing the new crossing and removing the existing crossing which will include the cost of relocating signals and any right of way needed. (Jack Dobrinska, Union Pacific Railroad, August 15, 2001)

April 30, 2003

Kawasaki Facility:

The Kawasaki property is located directly to the north of West Fletcher Avenue and between NW 13th Street and NW 27th Street. The Kawasaki Director/Plant Manager's primary concerns are to 1) maintain safe and convenient access to their facility, 2) maintain their property in a single, continuous tract and 3) not have an access to US-34 crossing the Kawasaki plant property near NW 20th Street. These concerns have been worked out during the annexation agreement the City of Lincoln has with Kawasaki.

Kawasaki Expansion

The Kawasaki plant was recently expanded to accommodate new production facilities which are also adding employees. Current personnel census at the Kawasaki plant (December 2002) includes 1,056 full time employees and 300 temporary employees. There are three production shifts at the plant with the first shift being the largest (estimated at 50% of employment). Projected expansion over the next 5 to 10 years is expected to increase the number of employees from 2,500 to 3,000 each work day.

Current trips to this plant based on ITE trip generation factors for 1,356 employees is 4,095 driveway trips per day. The trips projected based on the potential of 2,500 to 3,000 employees is 7,550 to 9,060 driveway trips per day. This growth potential supports the need to develop suitable transportation facilities within this area that will both support the industry and accommodate neighborhood concerns.

Estimated Trip Growth for Kawasaki Plant

Date	Employees	Daily Trip Rate per Employee	Daily Trips Projected
December 9, 2002	1,356	3.02	4,095
2002 Average	1,200	3.02	3,624
Projected for 2015	2,500 - 3,000	3.02	7,550 - 9,060

Kawasaki Annexation Agreement

The annexation agreement the City of Lincoln has with Kawasaki does oblige the City to develop the West Fletcher Avenue connection from NW 13th Street to NW 20th Street. According to this agreement, Kawasaki is to pay the City \$300,000 as its share of the cost of the improvements of West Fletcher Avenue provided the construction project is completed by December 31, 2004. The segment of West Fletcher Avenue, NW 20th Street to NW 27th Street includes two through lanes plus turn lanes at intersections and is currently under contract/construction with an expected completion in 2003. The design phase of West Fletcher Avenue, NW 13th to NW 20th Street, is to begin in the fall of 2003 with construction to be completed by the end of 2004. City will work with the neighborhood on the intersection design issues.

\

April 30, 2003

Kawasaki Access

The Kawasaki Director/Plant Manager of the Lincoln Kawasaki facility is primarily concerned with providing safe and convenient access to the plant. The new half diamond on and off ramps to US-34 and a connection to NW 13th Street are their principal concerns. The Director/Plant Manager understands the safety and operational concerns both the City and the Union Pacific Railroad have in providing a safe and efficient railroad crossing. City staff has met with Kawasaki representatives several times and the City is continuing to work with them to address any concerns they may have.

Fletcher Avenue Extension, NW 27th Street to NW 31st Street: Traffic Analysis

The traffic count on Wildrose Lane taken before the ramps to US-34 were opened to traffic was 4,570 vehicles per day (September, 2001). This figure includes approximately 400 vehicles per day in traffic using NW 27th Street north of US-34. The majority of the traffic on Wildrose Lane at the time of this count was destined to the Kawasaki manufacturing plant which is estimated at 4,200 vehicles per day. Trips to the plant at this time period did vary due to the ongoing use of temporary manufacturing personnel and the construction activity at the plant.

Current traffic estimates to the plant are based on the personnel census at the Kawasaki plant today which includes 1,056 full time employees and 300 temporary employees. There are three production shifts at the plant with the first shift being the largest (estimated at 50% of employment). Projected employee trips for the year 2015 is based on ITE trip generation factors for an average of 2,500 to 3,000 employees will range from 7,550 to 9,060 driveway trips per day.

It is expected that the bulk of these trips will continue to use the US-34 ramps as they do today. New roadway connections will allow alternative access to this general area and to the Kawasaki facility. Traffic projection for the year 2025 along West Fletcher Avenue between NW 13th Street to NW 27th Street is estimated at 9,500 vehicles per day. The traffic projection along West Fletcher between NW 27th Street to NW 31st Street is estimated at 7,500 vehicles per day. These projections support an urban arterial roadway design of two through lanes plus turn lanes at intersections. This is currently being designed and programmed.

Fletcher Avenue Corridor Improvements

Schemmer Associates Study

The City of Lincoln commissioned The Schemmer Associates to review the feasibility of replacing the proposed at-grade crossing of the Union Pacific Railroad along the West Fletcher Avenue corridor with a grade separated crossing. The study evaluated the costs for 1) an overpass option resulting in a cost of approximately \$5 million, and 2) a roundabout option which was estimated at \$1.4 million. In addition to the additional cost of a grade separated crossing, there are concerns that this design would greatly compromise or eliminate access to NW 27th Street and adjacent properties.

April 30, 2003

A second element of this study was to see if the warrant for a grade separated crossing would be met. This warrant is based on the projected train and vehicle traffic for the crossing. The basic formula for indicating the need for a grade separation at a rail crossing is when the product of daily vehicles multiplied by the number of daily trains is greater than 50,000 (source: Nebraska Department of Roads). Currently there is an average of 2 trains per day at the West Fletcher Avenue crossing with a projected number of no more than 4 trains a day. The projected vehicular volume at this crossing for the year 2025 is 7,500 vehicles per day. According to this analysis, the projected train/vehicle traffic over the next 25 years will not meet the target for warranting a grade separation at this location.

The resulting Schemmer Associates' recommendation is to develop West Fletcher Avenue with an at-grade crossing and eliminate the Wildrose Lane crossing.

Transportation Improvement Program

The following is the street construction program for West Fletcher Avenue.

1. **West Fletcher Avenue - NW 20th Street to NW 27th Street.** This project includes two through lanes plus turn lanes at intersections and is expected to be completed in FY 2002-03. (This is currently under contract / construction.)
2. **West Fletcher Avenue - NW 20th Street to NW 13th Street.** This segment is programmed for FY 2003-04.
3. **West Fletcher Avenue - NW 27th Street to NW 31st Street.** This is to improve West Fletcher Avenue to two through lanes in FY 2004-06.

North Growth Areas :

The Growth Areas identified in the Lincoln-Lancaster County Land Use Plan to the north of US-34 are to be served with an interconnecting north-south street network crossing US-34. Connections shown in the Transportation Plan include a future NW 13th Street overpass and the NW 27th Street underpass, both as 4-Lane facilities. Discussions on developing access to US-34 at NW 13th Street was found to be located too close to the Fallbrook entrance for proper ramp spacing and is unacceptable to the Highlands Neighborhood Association.

Other areas of potential development are the remaining undeveloped Kawasaki property to the east of the existing facility and the undeveloped land to south of West Fletcher Avenue and west of the Highlands Golf course. Both properties will take access off West Fletcher Avenue.

Highlands Neighborhood Concerns :

The Highlands Neighborhood Association has several concerns which are focused on traffic traveling through their neighborhood. These include; 1) a safe crossing of NW 13th Street from the neighborhood to

April 30, 2003

the swimming pool, and 2) traffic speed control and pedestrian safety on West Fletcher from NW 1st Street to NW 13th Street. The neighborhood's concerns will be addressed more specifically during the roadway design phase of West Fletcher Avenue, NW 13th Street to NW 20th Street, which is to begin in the fall of 2003.

Airport Authority

The Airport Authority owns the property bordering Wildrose Lane and the future West Fletcher Avenue corridor. The Airport does not have any plans to develop this ground since this is located directly at the end of Runway "A" and in the "Inner Approach Area." The Airport Authority's primary concerns are to continue to be involved in the planning process and to defer any costs to the City and County.

County Engineer

The County Engineering office has worked with the City over the past two years in identifying the key issues for the Wildrose Lane and West Fletcher Avenue Study. The County Engineer is in general agreement with the conclusions of this report.

Conclusion

After lengthy consideration and study of potential options, the City of Lincoln Public Works and Utilities Department recommends closure of Wildrose Lane. This item was also reviewed by the Technical Committee of the Metropolitan Planning Organization (MPO Tech Committee) and recommended for approval. The MPO Tech Committee is made up of transportation and planning agencies members.

Due to the Union Pacific Railroad limitation for a single railroad crossing and based on the existing location and design problems of Wildrose Lane, this amendment is necessary before moving ahead with the design and construction of the West Fletcher Avenue segment between NW 27th Street and NW 31st Street.

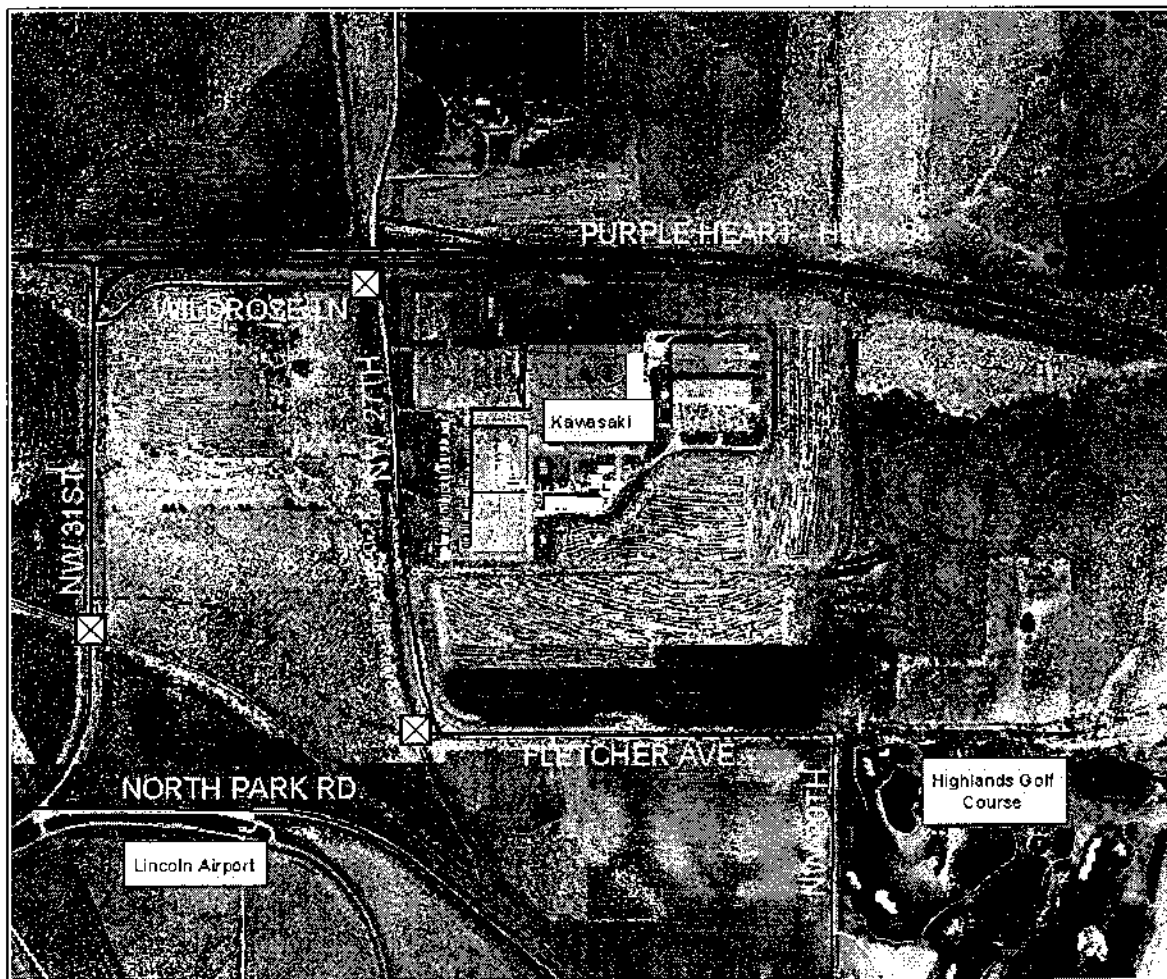
Amend the Comprehensive Plan as follows:

1. Remove the "Wildrose Lane Study" designation from the Lincoln Area Street & Roadway Improvements 2025 map in the Future Conditions: Mobility & Transportation, page F-105.
2. Remove the "Wildrose Lane Study" from the Proposed Studies section in the Future Conditions: Mobility & Transportation section, page F-111. Add the following text to the end of the proposed studies list:






"The Wildrose Lane Study was completed in 2003. The conclusion was that the future closure and right of way vacation of Wildrose Lane, from NW 27th Street to NW 31st Street will occur after West Fletcher Avenue, from NW 27th Street to NW 31st Street, is open to traffic."

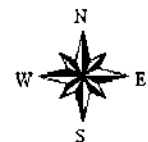
April 30, 2003

West Fletcher Ave. Corridor Study



Legend

-  RR Crossing
-  RR
-  Hwy. 34
-  Streets
-  Proposed Roadway



Lincoln / Lancaster County
Public Works Department
Engineering Services

^{**}Aerial photo: 1987^{**}